November 20, 2002

Re: Philips Pipe Line Company 089-16040-00326

TO: Interested Parties / Applicant

FROM: Paul Dubenetzky

Chief, Permits Branch Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, ISTA Building, 150 W. Market Street, Suite 618, Indianapolis, IN 46204, within (18) eighteen days of the mailing of this notice. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) the date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for consideration at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosure FNPERMOD.wpd 8/21/02

November 20, 2002

Mr. W. D. Jones Philips Pipe Line Company 400 East Columbus Drive East Chicago, IN 46132

Re: **089-16040-00326**

Minor Source Modification to:

Part 70 permit No.: **T089-7520-00326**

Dear Mr. Jones:

Philips Pipe Line Company was issued Part 70 operating permit T089-7520-00326 on June 12, 1998 for a stationary bulk liquid fuel storage and transfer terminal. An application to modify the source was received on September 3, 2002. Pursuant to 326 IAC 2-7-10.5 the following modification is approved for construction at the source:

Tanks 2601 and 2602 shall be changed from fixed roof tanks to internal roof tanks and the fuel stored in the tanks shall be changed from distillate oil only to distillate oil and gasoline.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

- The data and information supplied with the application shall be considered part of this source modification approval. Prior to <u>any</u> proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Management (OAM).
- 2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
- 3. Effective Date of the Permit

Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

- 4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
- 5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
- 6. Pursuant to 326 IAC 2-7-10.5(I) the emission units constructed under this approval shall <u>not</u> be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The source may begin construction when the minor source modification has been issued. Operating conditions shall be incorporated into the Part 70 operating permit as a minor permit modification in accordance with 326 IAC 2-7-10.5(I)(2) and 326 IAC 2-7-12.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Scott Fulton or extension (3-5691), or dial (317) 233-5691.

Sincerely,

Original Signed by Paul Dubenetzky Paul Dubenetzky, Chief Permits Branch Office of Air Quality

Attachments SDF

cc: File - Lake County

Lake County Health Department
East Chicago Local Agency
Northwest Regional Office
Air Compliance Section Inspector - Rick Massoels / Ramesh Tejuja
Compliance Data Section - Karen Nowak
Administrative and Development
Technical Support and Modeling - Michele Boner

PART 70 MINOR SOURCE MODIFICATION OFFICE OF AIR QUALITY

Phillips Pipe Line Company 400 East Columbus Drive East Chicago, Indiana 46132

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Minor Source Modification No.: 089-16040-00326	
	Issuance Date: November 20, 2002
Issued by: Original Signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	

Philips Pipe Line Company East Chicago, Indiana Permit Reviewer: SCP/EVP

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Philips Pipe Line Company East Chicago, Indiana Permit Reviewer: SCP/EVP

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM), and presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary bulk liquid fuel storage and transfer terminal.

Responsible Official D. R. DuBois, Vice President

Source Address: 400 East Columbus Drive, East Chicago, Indiana 46132 Mailing Address: 362 Adams Building, Bartlesville, Oklahoma 74004

SIC Code: 5171 County Location: Lake

County Status: Attainment for CO and Lead

Primary Nonattainment for TSP and SO₂ Moderate Nonattainment for PM-10 Severe Nonattainment for ozone

Source Status: Part 70 Permit Program

Major Source, under Emission Offset Rules; Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

- (a) One (1) 813,624 gallon external floating roof gasoline storage tank, identified as T-201, with primary and secondary seals, constructed in 1939;
- (b) One (1) 653,100 gallon external floating roof gasoline storage tank, identified as T-202, with primary and secondary seals, constructed in 1939;
- (c) One (1) 616,938 gallon internal floating roof gasoline storage tank, identified as T-204, with a primary seal, constructed in 1939;
- (d) One (1) 630,252 gallon internal floating roof gasoline storage tank, identified as T-207, with a primary seal, constructed in 1946;
- (e) One (1) 1,465,002 gallon geodesic dome gasoline storage tank, identified as T-401, with a primary seal, constructed in 1952
- (f) Two (2) 2,956,380 gallon external floating roof gasoline storage tanks, identified as T-801 and T-802, both with primary and secondary seals, both constructed in 1939;
- (g) One (1) 2,759,316 gallon external floating roof gasoline storage tank, identified as T-803, with primary and secondary seals, constructed in 1939;
- (h) One (1) 2,853,732 gallon external floating roof gasoline storage tank, identified as T-804, with primary and secondary seals, constructed in 1939;
- (i) One (1) 2,843,274 gallon external floating roof gasoline storage tank, identified as T-806, with primary and secondary seals, constructed in 1939;

- (j) Two (2) 2,857,890 gallon geodesic dome gasoline storage tanks, identified as T-809 and T-810, each with a primary seal, both constructed in 1952;
- (k) One (1) 696,695 gallon internal floating roof gasoline/transmix (a gasoline/distillate oil mixture) storage tank, identified as T-209, with a primary seal, constructed in 1946;
- (I) One (1) 3,055,543 gallon external floating roof gasoline/transmix storage tank, identified as T-805, with primary and secondary seals, constructed in 1939;
- (m) One (1) 2,841,552 gallon geodesic dome gasoline/transmix storage tank, identified as T-808, with a primary and seal, constructed in 1952;
- (n) Two (2) 15,204 gallon horizontal fixed roof gasoline additive storage tanks, identified as T-1501 and T-1502, both constructed in 1940;
- (o) One (1) 739,830 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-208, constructed in 1946;
- (p) One (1) 964,824 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-240, constructed in 1968;
- (q) One (1) 8,633,646 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2101, constructed in 1955;
- (r) One (1) 8,618,190 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-2102, constructed in 1955;
- (s) One (1) 10,847,424 gallon internal floating roof distillate/kerosene storage tank, identified as T-2601, constructed in 1960;
- (t) One (1) 10,835,328 gallon internal floating roof distillate/kerosene storage tank, identified as T-2602, constructed in 1960;
- (u) Two (2) 635,040 gallon vertical fixed roof distillate/kerosene storage tanks, identified as T-205 and T-206, constructed in 1939;
- (v) One (1) 3,419,559 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-807, constructed in 1939;
- (w) VOC emissions from liquid fuel loading rack, controlled by a vapor combustion unit, identified as VCU;
- VOC emissions from liquid fuel loading rack, identified as RACK, with a maximum capacity of loading 324,000 gallons of liquid fuel per hour, and controlled by a vapor recovery unit, identified as VCU;
- (y) One (1) VOC fractionator for separating gasoline and fuel oil of transmix tanks, identified as FRACT, which vents 125 cubic feet of VOC vapor per minute during intermittent pressure relief with venting gas being controlled by VCU, and equipped with a 7.0 million million British thermal units per hour natural gas fired reboiler;
- (z) Fugitive emissions at loading rack;

- (aa) One (1) vapor combustion unit (VCU), used for controlling VOC emissions from loading rack gasoline transfer, installed in 1997 to replace the then existing vapor recovery unit to improve VOC control efficiency, equipped with a natural gas fired 1.6 million British thermal units per hour Petro-Chem furnace.
- (bb) A wastewater handling and treatment system, capable of treating 420,000 gallons of contaminated water per hour, including the following activities:
 - (1) Five (5) sumps for wastewater from tank water draw and roof drains;
 - (2) One (1) sump for wastewater from loading rack;
 - One (1) 8,946 gallon internal floating roof waste water/gasoline storage tank, identified as T-103, constructed in 1939;
 - (4) One (1) oil/water separator, identified as Separator No. 1, with a capacity of 1,800 gallons per hour; and
 - (5) One (1) air stripper capable of processing 9,000 gallon of water per hour.
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1 (21) that have applicable requirements.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because::

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

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Philips Pipe Line Company East Chicago, Indiana Permit Reviewer: SCP/EVP

SECTION D.1

FACILITY OPERATION CONDITIONS

- (a) One (1) 813,624 gallon external floating roof gasoline storage tank, identified as T-201, with primary and secondary seals, constructed in 1939;
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- (u) Two (2) 635,040 gallon vertical fixed roof distillate/kerosene storage tanks, identified as T-205 and T-206, constructed in 1939;
- (v) One (1) 3,419,559 gallon vertical fixed roof distillate/kerosene storage tank, identified as T-807, constructed in 1942; and
- (w) Cleaning of gasoline tanks.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-4-3]

Tanks T-103, T-201, T-202, T-204, T-207, T209, T-401, T-801, T-802, T-803, T-804, T-805, T-806, T-808, T-809 and T-810 are subject to the requirements of 326 IAC 8-4-3 (Petroleum Liquid Storage Facilities). 326 IAC 8-4-3 requires the following:

(a) For External Fixed Roof Tanks

- (1) The facility must be retrofitted with an internal floating roof equipped with a closure seal, or seals, to close the space between the roof edge and tank wall unless the source has been retrofitted with equally effective alternative control which has been approved.
- (2) The facility is maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials.
- (3) All openings, except stub drains, are equipped with covers, lids, or seals such that::
 - (A) the cover, lid, or seal is in the closed position at all times except when in actual use;
 - (B) automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;
 - (C) rim vents, if provided are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

(b) For External Floating Roof Tanks

The Permittee shall not store a petroleum liquid in that facility unless:

- (1) The facility has been fitted with:
 - (A) a continuous secondary seal extending from the floating roof to the tank wall (rimmounted secondary seal); or
 - (B) a closure or other device approved by the commissioner which is equally effective.
- (2) All seal closure devices meet the following requirements:
 - (A) there are no visible holes, tears, or other openings in the seal(s) or seal fabric;
 - (B) the seal(s) are intact and uniformly in place around the circumference of the floating roof between the floating roof and the tank wall;
 - (C) for vapor mounted primary seals, the accumulated gap area around the circumference of the secondary seal where a gap exceeding one-eighth (1/8) inch exists between the secondary seal and the tank wall shall not exceed 1.0 square inch per foot of tank diameter. There shall be no gaps exceeding on-half (½) inch between the secondary seal and the tank wall of welded tanks and no gaps exceeding one (1) inch between the secondary seal and the tank wall of riveted tanks.
- (3) All openings in the external floating roof, except for automatic bleeder vents, rim space vents, and leg sleeves are:
 - (A) equipped with covers, seals, or lids in the closed position except when the openings are in actual use; and
 - (B) equipped with projections into the tank which remain below the liquid surface at all times.

Philips Pipe Line Company East Chicago, Indiana Permit Reviewer: SCP/EVP

- (4) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports;
- (5) Rim vents are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting; and

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(6) Emergency roof drains are provided with slotted membrane fabric covers or equivalent covers which cover at least ninety percent (90%) of the area of the opening.

D.1.2 Volatile Organic Compounds [326 IAC 8-9-4]

The owner or operator shall, for all tanks that are not of the types listed in 326 IAC 8-9-2, comply with the following requirements as applicable:

- (a) The owner or operator shall, for all tanks with a capacity greater than or equal to thirty-nine thousand (39,000) gallons, storing volatile organic liquids (VOL) with a maximum true vapor pressure greater than or equal to seventy-five hundredths (0.75) pound per square inch absolute (psia) but less than eleven and one-tenth (11.1) psia, comply with the following requirements:
 - (1) Each vessel having a permanently affixed roof shall be equipped with one (1) of the following:
 - (A) an internal floating roof that meets the standards listed in Part (c) of this Condition,
 - (B) a closed vent system and control device that meets the standards listed in Part (d) of this Condition, or
 - (C) an alternative emissions control system that achieves the same emissions reductions as the method listed in Part (a)(1)(A) of this Condition.
 - (2) Each vessel having an internal floating roof shall be equipped with one (1) of the following:
 - (A) an internal floating roof that meets the standards listed in Part (c) of this Condition,
 - (B) a closed vent system and control device that meets the standards listed in Part (d) of this Condition, or
 - (C) an alternative emissions control system that achieves the same emissions reductions as the method listed in Part (a)(2)(A) of this Condition.
 - (3) Each vessel having an external floating roof, shall be equipped with one (1) of the following:
 - (A) an external floating roof that meets the standards listed in Part (e) of this Condition.
 - (B) a closed vent system that meets the standards listed in Part (d) of this Condition, or
 - (C) an alternative emissions control system that achieves the same emissions reductions as the method listed in Part (a)(3)(A) of this Condition.
 - (4) Each vessel under Parts (a) and (b) of this Condition shall be equipped with one (1) of the following:
 - (A) emission control equipment, or
 - (B) emission control equipment and a schedule for vessel cleaning.

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> (b) The owner or operator shall, for all tanks with a capacity greater than or equal to thirty-nine thousand (39,000) gallons that store a VOL with a maximum true vapor pressure greater than or equal to eleven and one-tenth (11.1) psia, but less than or equal to 29.4 psia, equip each vessel with a closed vent system and control device that meets the standards listed in Part (d) of this Condition.

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- (c) The owner or operator shall, for each storage vessel with an internal floating roof, comply with the following standards:
 - (1) Each applicable tank shall be equipped with permanent affixed roof.
 - (2) Each internal floating roof shall be designed and operated such that the roof floats on the liquid surface at all times, except during initial fill and during those intervals when the vessel is completely emptied or subsequently emptied and refilled.

For the purposes of this Part of the Condition, "floating on the liquid surface" does not mean in complete contact with the liquid surface.

- (3) When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
- (4) Each internal floating roof shall be equipped with one (1) of the following closure devices:
 - (A) a foam or liquid-filled seal that is mounted in contact with the liquid (liquid-mounted seal),
 - (B) two (2) seals that are mounted one (1) above the other such that each seal forms a continuous closure that completely covers the space between the wall of the vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous, or
 - (C) a mechanical shoe seal that:
 - (i) consists of a metal sheet held vertically against the wall of the vessel by springs or weighted levers, and is connected by braces to the floating roof, and
 - (ii) a flexible coated fabric or envelope that spans the annular space between the metal sheet and the floating roof.

The closure device selected shall be installed between the wall of the vessel and the edge of the internal floating roof.

- (5) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents shall provide a projection below the liquid surface.
- (6) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a gasketed cover or lid that shall be maintained in a closed position at all times (with no visible gap) except when the device is in actual use. The covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
- (7) All automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
- (8) All rim space vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

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> (9) All sampling through the internal floating roof shall be conducted in a sample well. The sampling well shall have a slit fabric cover that covers at least ninety percent (90%) of the opening.

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- (10) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
- (d) The owner or operator shall, for each storage vessel with a closed vent system and control device, comply with the following standards:
 - (1) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the vessel and operated with no detectable emission as indicated by an instrument reading of less than five hundred (500) parts per million (ppm) above background and visual inspections as determined by the methods specified in 40 CFR 60, Subpart VV, 60.485(C)*.
 - (2) The control device shall be designed and operated to reduce inlet VOC emissions by ninety-five percent (95%) or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements in 40 CFR 60.18, General Provisions*.
 - * Copies of 40 CFR 60, Subpart VV, 60.485(C); and 40 CFR 60.18, General Provisions referenced may be obtained from the Government Printing Office, Washington, D.C. 20402 or the Indiana Department of Environmental Management, Indiana Government Center North, 100 North Senate Avenue, Indianapolis, Indiana 46204-2220.
- (e) The owner or operator shall, for each storage vessel with an external floating roof, comply with the following standards:
 - (1) Each external floating roof shall be equipped with a closure device between the wall of the vessel and the roof edge. The closure device shall consist of two (2) seals, one (1) above the other. The lower seal shall be referred to as the primary seal; the upper seal shall be referred to as the secondary seal.
 - (2) Except as provided in Part (b)(4) of Condition D.1.8, the primary seal shall completely cover the annular space between the edge of the floating roof and vessel wall and shall be either a liquid-mounted seal or a shoe seal.
 - (3) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the vessel in a continuous fashion except as allowed in Part (b)(4) of Condition D.1.8.
 - (4) Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface.
 - (5) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid that shall be maintained in a closed position at all times, without visible gap, except when the device is in actual use.
 - (6) All automatic bleeder vents shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
 - (7) All rim vents shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents shall be gasketed.
 - (8) Each emergency roof drain shall be provided with a slotted membrane fabric cover that covers at least ninety percent (90%) of the area of the opening.

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(9) The roof shall be floating on the liquid at all times, for example, off the roof leg supports, except when the vessel is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

D.1.3 Hazardous Air Pollutants (HAPs) [40 CFR Part 63.420]

The Permittee shall:

- (a) Limit amount of material handled by all storage tanks to the following:
 - (1) 2,007 million gallons of gasoline, with Tanks T-801 T-810 (excluding T-807) handling 50% of the throughput;
 - (2) 789 million gallons of distillate fuel and all other non-gasoline materials.

per twelve (12) month period, rolled on a monthly basis.

(b) Limit gasoline tank cleaning to 432 hours per twelve (12) month period, rolled on a monthly basis.

These requirements, in conjunction with the limits established in Conditions D.2.3 and D.3.1 shall limit the source wide total of the worst case single HAP to 7.0 tons, and total HAPs to 24 tons, per twelve (12) month period, rolled on a monthly basis. Therefore, the requirements of 40 CFR Part 63.420, Subpart R, National Emission Standards for Gasoline Terminals and Pipeline Breakout Stations, do not apply.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.1.5 Testing Requirements [326 IAC 2-7-6(1)]

Testing of the tanks listed in this section is not specifically required by this permit to demonstrate compliance with the limits of Condition D.1.3. However, if testing is required, compliance with the VOC and HAP limits specified in Condition D.1.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing. This does not preclude any applicable testing requirements under 326 IAC 2-7-5 and 326 IAC 2-7-6.

D.1.6 Methods That Can Be Used to Determine True Vapor Pressure [326 IAC 8-9-6(i)]

If the owner or operator is required to determine the maximum true vapor pressure of any applicable tanks, the owner or operator may use available storage temperature data to determine the pressure provided the owner or operator follows the procedures specified below:

- (a) The maximum true vapor pressure for VOLs stored at temperatures above or below ambient temperature shall correspond to the highest local calendar-month average storage temperature, as reported by the National Weather Service.
- (b) For local crude oil or refined petroleum products, the maximum true vapor pressure may be determined as follows:

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> (1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar month average storage temperature, as reported by the National Weather Service may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517* unless the OAQ specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the samples.

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- (2) The maximum true vapor pressure of each type of crude oil with a Reid vapor pressure less than two (2) pounds per square inch or with physical properties that preclude determination by the recommended method shall be determined from available data and recorded if the estimated maximum true vapor pressure is greater than five-tenths (0.5) psia.
- (c) For all other liquids, the maximum true vapor pressure may be determined by any of the following standard methods:
 - (1) Standard reference texts,
 - (2) ASTM Method D2879-92*, or
 - (3) Calculated or measured by a method approved by the OAQ.
- * Copies of ASTM Method 2879-92 and API Bulletin 2517 referenced may be obtained from the Government Printing Office, Washington, D.C. 20402 or the Indiana Department of Environmental Management, Indiana Government Center-North, 100 North Senate Avenue, Indianapolis, Indiana 46204-2220.

D.1.7 Testing Requirements, Vessels Storing a Waste Mixture of Indeterminate or Variable Composition [326 IAC 8-9-6(i)]

The owner or operator of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements:

- (a) Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in Condition D.1.6.
- (b) For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for monitoring but below the cutoff for controls as defined in Part (a) of Condition D.1.2, the owner or operator shall perform an initial physical test of the vapor pressure an a subsequent physical test at least once every six (6) months thereafter, using one (1) of the following methods:
 - (1) ASTM Method D2879-92*,
 - (2) ASTM Method D323-82*, or
 - (3) an alternative method approved by the OAQ.
- * Copies of ASTM Method 2879-92 and ASTM Method D323-82 referenced may be obtained from the Government Printing Office, Washington, D.C. 20402 or the Indiana Department of Environmental Management, Indiana Government Center-North, 100 North Senate Avenue, Indianapolis, Indiana 46204-2220.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.8 Monitoring, Tanks with Internal Floating Roofs [326 IAC 8-9-5]

The owner or operator shall, for all tanks subject to the requirements of Part (a) of Condition D.1.2, comply with the following requirements as applicable:

- (a) Except as provided in Part (a)(2) of Condition D.1.2, the owner or operator shall, for each vessel equipped with an internal floating roof shall:
 - (1) Visually inspect the internal floating roof, the primary seal, and the secondary seal, if one is in service, prior to filling the vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the vessel.
 - (2) For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal, if one is in service, through manholes and roof hatches on the fixed roof at least once every twelve (12) months after initial fill.

If the internal floating roof is not resting on the surface of the VOL inside the vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the vessel from service within forty-five (45) days.

If a failure that is detected during inspections required in this section cannot be repaired in forty-five (45) days and if the vessel cannot be emptied within forty-five (45) days, a thirty (30) day extension may be requested from the department in the inspection report required in Part (e)(1)(C) of Condition D.1.9. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

- (3) For vessels equipped with both primary and secondary seals:
 - (A) visually inspect the vessel as specified in Part (a)(4) of this Condition, at least every five (5) years; or
 - (B) visually inspect the vessel as specified in subdivision Part (a)(2) of this Condition.
- (4) Visually inspect the internal floating roof, the primary seal, the secondary seal, if one is in service, gaskets, slotted membranes, and sleeve seals each time the vessel is emptied and degassed.

If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than ten percent (10%) open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this subdivision exist before refilling the vessel with VOL.

In no event shall the inspections required by this subsection occur at intervals greater than ten (10) years in the case of vessels conducting the annual visual inspection as specified in Parts (a)(2) and (a)(3)(B) of this Condition and at intervals no greater than five (5) years in the case of vessels specified in Part (a)(3)(A) of this Condition.

(5) Notify the department in writing at least thirty (30) days prior to the filling or refilling of each vessel for which an inspection is required by Parts (a)(1) and (a)(4) of this Condition to afford the department the opportunity to have an observer present.

If the inspection required by Part (a)(4) of this Condition is not planned and the owner or operator could not have known about the inspection thirty (30) days in advance of refilling the vessel, the owner or operator shall notify the department at least seven (7) days prior to the refilling of the vessel. Said notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification, including the written documentation, may be made in writing and sent by express mail so that it is received by the department at least seven (7) days prior to the refilling.

- (b) Except as provided in section Part (a)(3) of Condition D.1.2, the owner or operator shall, for each vessel equipped with an external floating roof shall:
 - (1) Determine the gap areas and maximum gap widths between the primary seal and the wall of the vessel and between the secondary seal and the wall of the vessel according to the following frequency:
 - (A) Measurements of gaps between the vessel wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within sixty (60) days of the initial fill with VOL and at least once every five (5) years thereafter.
 - (B) Measurements of gaps between the vessel wall and the secondary seal shall be performed within sixty (60) days of the initial fill with VOL and at least once per year thereafter.
 - (C) If any source ceases to store VOL for a period of one (1) year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for purposes of this subdivision.
 - (2) Determine gap widths and areas in the primary and secondary seals individually by the following procedures:
 - (A) Measure seal gaps, if any, at one (1) or more floating roof levels when the roof is floating off the roof leg supports.
 - (B) Measure seal gaps around the entire circumference of the vessel in each place where a one-eighth (c) inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the vessel and measure the circumferential distance of each such location.
 - (C) The total surface area of each gap described in clause (B) shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.
 - (3) Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each by the nominal diameter of the vessel and compare each ratio to the respective standards in Part (b)(4) of this Condition.
 - (4) Make necessary repairs or empty the vessel within forty-five (45) days of identification of seals not meeting the following requirements:
 - (A) The accumulated area of gaps between the vessel wall and the mechanical shoe or liquid-mounted primary seal shall not exceed ten (10) square inches per foot of vessel diameter, and the width of any portion of any gap shall not exceed one and five-tenths (1.5) inches. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.

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- (B) The secondary seal shall meet the following requirements:
 - (i) The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in Part (b)(2)(C) of this Condition.

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- (ii) The accumulated area of gaps between the vessel wall and the secondary seal used in combination with a metallic shoe or liquid-mounted primary seal shall not exceed one (1) square inch per foot of vessel diameter, and the width of any portion of any gap shall not exceed five-tenths (0.5) inch. There shall be no gaps between the vessel wall and the secondary seal when used in combination with a vapor-mounted primary seal.
- (iii) There shall be no holes, tears, or other openings in the seal or seal fabric.
- (C) If a failure that is detected during inspections required in Part (b)(1) cannot be repaired within forty-five (45) days and if the vessel cannot be emptied within forty-five (45) days, a thirty (30) day extension may be requested from the department in the inspection report required in Part (e)(2)(C) of Condition D.1.9.
 - Such extension request must include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.
- (5) Notify the department thirty (30) days in advance of any gap measurements required by Part (b)(1) to afford the department the opportunity to have an observer present.
- (6) Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. For all visual inspections, the following requirements apply:
 - (A) If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal fabric, the owner or operator shall repair the items as necessary so that none of the conditions specified in this clause exist before filling or refilling the vessel with VOL.
 - (B) The owner or operator shall notify the department in writing at least thirty (30) days prior to the filling or refilling of each vessel to afford the department the opportunity to inspect the vessel prior to the filling. If the inspection required by this subdivision is not planned and the owner or operator could not have known about the inspection thirty (30) days in advance of refilling the vessel, the owner or operator shall notify the department at least seven (7) days prior to the refilling of the vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the department at least seven (7) days prior to the refilling.
- (d) The owner or operator shall, for each vessel that is equipped with a closed vent system and control device described in Parts (a)(1)(B), (a)(2)(B), or (a)(3)(B) of Condition D.1.2 and meeting the requirements of Part (d) of Condition D.1.2, other than a flare:
 - (1) submit to the department an operating plan containing the following information:

(A) Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation shall include a description of the gas stream that enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device.

If the control device or the closed vent capture system receives vapor gases, or liquid other than fuels from sources that are not subject to this rule, the efficiency demonstration shall include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device.

If an enclosed combustion device with a minimum residence time of seventy-five hundredths (0.75) second and a minimum temperature of eight hundred sixteen degrees Centigrade (816EC) is used to meet the ninety-five percent (95%) requirement, documentation that those conditions will exist is sufficient to meet the requirements of this subdivision.

- (B) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used to monitor the parameter or parameters.
- (2) operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the department in accordance with subdivision (1) unless the plan was modified by the department during the review process. In this case, the modified plan applies.
- (e) The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in Parts (a)(4) or (d) of Condition D.1.2 shall meet the requirements specified in the general control device requirements in 40 CFR 60.18(e) and 40 CFR 60.18(f)*.
 - * Copies of 40 CFR 60.18(e) and 40 CFR 60.18(f) referenced may be obtained from the Government Printing Office, Washington, D.C. 20402 or the Indiana Department of Environmental Management, Indiana Government Center-North, 100 North Senate Avenue, Indianapolis, Indiana 46204-2220.

D.1.9 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, The Permittee shall maintain records of the types of volatile petroleum liquid stored, the maximum true vapor pressure of the liquid as stored, and the results of the inspections performed on the storage vessels. Such records shall be maintained for a period of two (2) years and shall be made available to the commissioner upon written request.
- (b) To document compliance with Condition D.1.3, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the liquid fuel throughput limits established in Condition D.1.3.
 - (1) The amount and type of liquid fuel transferred through tanks;
 - (2) The number of hours for conducting gasoline tank cleaning; and
 - (3) A log of the dates of liquid transfers and tank cleaning.

- (c) Pursuant to 60.116b(a) and (b), the owner or operator shall, for tanks 2601 and 2602, keep readily accessible records showing the dimension of the storage vessel and an analysis showing its capacity. Said records shall be kept for the life of the source.
- (d) Pursuant to 326 IAC 8-9-1 and 326 IAC 8-9-6, the owner or operator shall, for all tanks that are not of the types listed in 326 IAC 8-9-2:
 - (1) maintain a record containing, as applicable:
 - (A) the vessel identification number.
 - (B) the vessel dimensions,
 - (C) the vessel capacity, and
 - (D) a description of the emission control equipment for each vessel described in Parts (a) and (b) of Condition D.1.2, or a schedule for the installation of equipment on vessels described in Part (a) or (b) of Condition D.1.2 with a certification that the emission control equipment meets all applicable standards.

and

(2) submit a report containing the information required in Part (d)(1) of this Condition.

These records required shall be maintained for the life of the vessels.

- (e) Pursuant to 326 IAC 8-9-1(a) and 326 IAC 8-9-6, the owner or operator shall, for all tanks with a capacity of 39,000 gallons or more that store a VOL with a maximum true vapor pressure less than 0.5 psia, and all tanks with a capacity of 39,000 gallons or more that store a VOL with a maximum true vapor pressure equal to or greater than 0.75 psia but less than 29.4 psia, as applicable, comply with the following requirements:
 - (1) The owner or operator shall, for each vessel equipped with a permanently affixed or internal floating roof:
 - (A) Keep a record of each inspection performed as required in Parts (a)(1) through (a)(4) of Condition D.1.8, with each record identifying:
 - (i) the vessel inspected, by identification number,
 - (ii) the date the vessel was inspected, and
 - (iii) the observed condition of each component of the control equipment, including the following:
 - (a) all seals,
 - (b) an internal floating roof, and
 - (c) all fittings;
 - (B) If any of the conditions described in Part (a)(2) of Condition D.1.8 are detected during the required annual visual inspection, maintain a record and submit a report to the OAQ, identifying:
 - (i) the vessel by identification number.
 - (ii) the nature of the defects, and
 - (iii) the date the vessel was emptied or the nature of and date the repair was made;

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Said report shall be submitted within 30 days of the inspection.

and

- (C) After each inspection required in Part (a)(3) of Condition D.1.8 where holes or tears in the seal or seal fabric, defects in the internal floating roof, or other control equipment defects listed in Part (a)(3)(B) of Condition D.1.8 are detected, maintain and submit a report to the OAQ, identifying:
 - (i) the vessel identification number, and
 - (ii) the reason the vessel did not meet the specifications of Parts (a)(1)(A) or (a)(2)(A) of Condition D.1.2, or Part (a) of Condition D.1.8, and a description of all repairs made.

Said report shall be submitted within 30 days of the inspection.

- (2) The owner or operator shall, for each vessel equipped with an external floating roof:
 - (A) keep a record of each gap measurement performed as required by Part (b) of Condition D.1.8, with each record identifying the vessel in which the measurement was made and containing the following:
 - (i) the date of the measurement,
 - (ii) the raw data obtained in the measurement, and
 - (iii) the calculations described in Parts (b)(2) and (b)(3) of Condition D.1.8;
 - (B) within 60 days of performing the seal gap measurements required by Part (b)(1) of Condition D.1.8, furnish the OAQ with a report that contains:
 - (i) the date of the measurement,
 - (ii) the raw data obtained in the measurement, and
 - (iii) the calculations described in Parts (b)(2) and (b)(3) of Condition D.1.8;

and

- (C) after each seal gap measurement where gaps exceeding the limitations specified in Part (b) of Condition D.1.8 are detected, submit a report to the OAQ identifying the affected vessel and including the information required in Part (e)(2)(B) of this Condition, and the date the vessel was emptied or if the vessel was repaired, a list of the repairs made and the date(s) the repairs were made.
- (3) The owner or operator shall, for each vessel equipped with a closed vent system with a control device, comply with the following requirements:
 - (A) for all vessels that are equipped with a control device other than a flare, the owner or operator shall:
 - (i) submit an operating plan as required in Part (d) of Condition D.1.2, and
 - (ii) maintain the following records:

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- (a) the operating plan, and
- (b) all measured values of the parameters monitored according to the requirements of art (c)(2) of Condition D.1.8;

and

- (B) for all vessels with a closed vent system and a flare, the owner or operator shall:
 - (i) keep records of all periods of operation during which the flare pilot flame is absent,
 - (ii) furnish the OAQ with a report containing the measurements required by 40 CFR 60.18(f)(1) through 40 CFR 60.18(f)(5)* as required by 40 CFR 60.8.

Said report shall be submitted within 6 months of the initial startup date, and

- (iii) furnish the OAQ with a semiannual report of all periods recorded under 40 CFR 60.115* in which the pilot flame was absent.
- * Copies of the Code of Federal Regulations (CFR) referenced may be obtained from the Government printing Office, Washington, D.C. 20402 or the Indiana Department of Environmental Management, Indiana Government Center-North, 100 North Senate Avenue, Indianapolis, Indiana 46204-2220.
- (4) The owner or operator shall, for all tanks with a true vapor pressure less than 0.75 psia, maintain a record and notify the Office of Air Quality (OAQ) of all periods when the maximum true vapor pressure of the liquid exceeds 0.75 psia. The notification shall be submitted to the OAQ within 30 days of the exceedance.
- (f) Pursuant to 326 IAC 8-9-1(c) and 326 IAC 8-9-6, the owner or operator shall, for all tanks with a capacity of 39,000 gallons or more that store a VOL with a maximum true vapor pressure equal to or greater than 0.5 psia but less than 0.75 psia that is not equipped with a closed vent system with a control device meeting the standards of Condition D.1.2:
 - (1) maintain a record of the maximum true vapor pressure of the VOL stored in each applicable vessel, with the record containing:
 - (i) the type of VOL stored,
 - (ii) the dates of the VOL storage, and
 - (iii) for each day of VOL storage, the average stored temperature for VOLs stored above or below the ambient temperature or average ambient temperature for VOLs stored at ambient temperature, and the corresponding maximum true vapor pressure.

If any applicable tank under this Subpart of the Condition stores a waste mixture of indeterminate or variable composition, the owner or operator shall comply with the requirements of Condition D.1.7 instead of the requirements of this Subpart.

and

(2) maintain a record and notify the Office of Air Quality (OAQ) of all periods when the maximum true vapor pressure of the liquid exceeds 0.75 psia. The notification shall be submitted to the OAQ within 30 days of the exceedance. 1st Minor Source Modification 089-16040 Modified by: SDF

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If any applicable tank under of this Part of the Condition is equipped with a closed vent system and control device meeting the applicable requirements under Condition D.1.2, said tank(s) is/are exempt from the requirements of this Part.

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All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.10 Reporting Requirements

A quarterly or summary of the information to document compliance with Condition D.1.3 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Minor Source Modification and a Minor Permit Modification

Source Background and Description

Source Name: Philips Pipe Line Company

Source Location: 400 East Columbus Drive, East Chicago, Indiana

County: Lake SIC Code: 5171

Operation Permit No.: T 089-7520-00326 Issuance Date: June 12, 1998 First Minor Source Modification: 089-16040-00326 1st Minor Permit Modification: 089-16216-00326

Permit Reviewer: SDF

The Office of Air Quality (OAQ) has reviewed a Minor Source Modification and Minor Permit Modification application from Philips Pipe Line Company relating to the operation of a stationary bulk liquid fuel storage and transfer terminal.

The permit modification consists of changing tanks 2601 and 2602 from fixed roof tanks to internal floating roof tanks and changing the liquids stored from distillate oil to gasoline or distillate oil.

The proposed changes will not cause an increase in production or emissions from any existing units. Therefore, the emissions generated by the proposed modification are the fugitive VOC emissions generated by the proposed equipment.

Based on the emission calculations performed using the U.S. EPA Tanks 4.0 program, the VOC unrestricted potential to emit (UPTE) is determined to be 18.60 tons per year. Changing the fuel type stored from distillate oil to distillate oil or gasoline will generate an increase in the VOC unrestricted potential to emit (UPTE) and the actual VOC emissions from Tanks 2601 and 2602. Said increase in actual emissions make this proposed change a modification for the purposes of the New Source Performance Standards (NSPS).

The proposed modification shall therefore be permitted via a minor source modification pursuant to 326 IAC 2-7-10.5(d)(4)(B) which states any modification which has VOC potential to emit greater than or equal to 10 tons per year, but less 25 tons per year, shall be approved via a minor source modification.

The proposed modification shall be incorporated into the Part 70 permit via a minor permit modification pursuant to 326 IAC 2-7-12(b)(1) because the modification meets all of the requirements specified in 326 IAC 2-7-12(b)(1).

326 IAC 2-7-12(b)(1)(E) does state that a modification cannot be a minor modification if the modification is a Title I modification. However, even though the proposed modification does trigger an applicable Title I requirement, this proposed modification is not a Title I modification because pursuant to the OAQ guidance, "Title I Modifications Related to NSPS/NESHAP Changes", issued October 21, 1999, modifications where a NSPS is applicable but only has record keeping and reporting requirements, are not considered Title I modifications.

The only new applicable requirements associated with the proposed modification are 40 CFR 60, Subparts A and Kb.

For the purposes of this approval, the proposed changes are determined to be a modification, not construction, because the fixed capital cost of the project is 35.5% of a new replacement, which is less than the reconstruction applicable level of 50%.

Existing Approvals

Philips Pipeline Company was issued a Part 70 permit (089-7520-00326) on June 12, 1998. The source has since operating under this permit and the following approvals:

- (1) First Significant Permit Modification No. 089-11264, issued on December 6, 1999.
- (2) Second Significant Permit Modification No. 089-14987, issued on June 14, 2002.

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the Minor Source Modification and Minor Permit Modification be approved. This recommendation is based on the following facts and conditions.

Unless otherwise stated, information used in this review was derived from the application.

Emission Calculations

The emissions generated by the proposed modification are fugitive VOC emissions.

(a) Unrestricted Potential to Emit (UPTE):

The following table lists the VOC UPTE from tanks 2601 and 2602 based on the emission calculations performed using the U.S. EPA Tanks 4.0 program. The VOC emissions were determined using the worst case fuel stored in the tanks.

Tank	Tons VOC/yr	
2601	9.30	
2602	9.30	
Total	18.60	

(b) Emissions After Controls

The emissions are uncontrolled. Therefore, the emissions after controls equal the emissions before controls.

Tank	Tons VOC/yr
2601	9.30
2602	9.30
Total	18.60

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the PTE before controls from the proposed modification based on the above estimated emissions calculations. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)	
PM	-	
PM10	-	
SO2	-	
VOC	18.60	
СО	-	
NO _x	-	

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

Since the VOC emissions are greater than or equal to 10 tons per year, but less than 25 tons per year, the proposed modification shall be permitted via a minor source modification pursuant to 326 IAC 2-7-10.5(d)(4)(B) which states any modification which has VOC potential to emit greater than or equal to 10 tons per year, but less 25 tons per year, shall be approved via a minor source modification.

The proposed modification shall be incorporated into the Part 70 permit via a minor permit modification pursuant to 326 IAC 2-7-12(b)(1) because the modification meets all of the requirements specified in 326 IAC 2-7-12(b)(1).

326 IAC 2-7-12(b)(1)(E) does state that a modification cannot be a minor modification if the modification is a Title I modification. However, even though the proposed modification does trigger an applicable Title I requirement, this proposed modification is not a Title I modification because pursuant to the OAQ guidance, "Title I Modifications Related to NSPS/NESHAP Changes", issued October 21, 1999, modifications where a NSPS is applicable but only has record keeping and reporting requirements, are not considered Title I modifications.

State Rule Applicability

(a) Federal Rule Applicability

(1) New Source Performance Standards (NSPS):

(A) 40 CFR 60, Subpart K:

Tanks 2601 and 2602 are still not subject to 40 CFR 60, Subpart K because the tanks were constructed after the upper end applicable date of May 19, 1978.

(B) 40 CFR 60, Subpart Ka:

Tanks 2601 and 2602 are still not subject to 40 CFR 60, Subpart Ka because the tanks were constructed after the upper end applicable date of July 23, 1984.

(C) 40 CFR 60, Subpart Kb:

Tanks 2601 and 2602 are subject to the requirements because these tanks are being modified after the applicable date of July 23, 1984 and the capacities and true vapor pressures are greater than the applicable levels.

The tank capacities and true vapor pressures of tanks 2601 and 2602 are listed in the table below.

	Capacity (gallons)	True Vapor Pressure (kPa)
Tank 2601	10,847,382	0.69
Tank 2602	10,847,382	0.69

The tank capacities each are greater than 39,890 gallons and each tank's true vapor is less than 3.5 kPa. Thus, the tanks are only subject to Sections 60.116(a) and (b) under 60.110b(c) which states vessels with a capacity greater than 39,380 gallons storing a liquid with a true vapor pressure less than 3.5 kPa, is only subject to the requirements of 60.116b(a) and (b).

Pursuant to 60.116b(a) and (b), the owner or operator shall, for tanks 2601 and 2602, keep readily accessible records showing the dimension of the storage vessel and an analysis showing its capacity. Said records shall be kept for the life of the source.

(2) National Emission Standard for Hazardous Air Pollutants (NESHAP):

There are no National Emission Standard for Hazardous Air Pollutants, 40 CFR 61 or 63, that apply to the tanks of this source.

(b) State Rule Applicability - Entire Source

(1) 326 IAC 2-7-6(1) (Preventive Maintenance Plan):

The proposed changes will not affect the requirement to have a Preventive Maintenance Plan under 326 IAC 2-7-6(1).

(2) 326 IAC 2-6 (Emission Reporting):

The source is still subject to 326 IAC 2-6 (Emission Reporting), because it has a VOC potential to emit greater than the Lake County applicable level of 10 tons per year.

(3) 326 IAC 5-1 (Visible Emissions Limitations):

Pursuant to 326 IAC 5-1-2(2) (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions for sources located in Lake County shall meet the following limitations, unless otherwise stated in this permit:

- (a) visible emissions shall not exceed an average of twenty percent (20%) opacity in twenty-four (24) consecutive readings; and
- (b) visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes in a six (6) hour period.

(4) 326 IAC 6-4 (Fugitive Dust Emissions):

This source is still subject to 326 IAC 6-4 for fugitive dust emissions.

(c) State Rule Applicability - Individual Facilities

(1) 326 IAC 8-4-3 (Petroleum Liquid Storage Facilities):

The requirements of 326 IAC 8-4-3 still do not apply to Tanks 2601 and 2602 because the tank properties are still below the levels that make the rule applicable.

(2) 326 IAC 8-9 (Volatile Organic Liquid Storage Vessels):

The requirements of 326 IAC 8-9 still apply to Tanks 2601 and 2602 because the tanks still meet the criteria that make the rule applicable. The following is an analysis of the applicability.

(a) 326 IAC 8-9-2 (Volatile Organic Liquid Storage Vessels, Exemptions):

The requirements of 326 IAC 8-9-2 still apply to Tanks 2601 and 2602 because the tanks still meet the criteria that make the rule applicable.

(b) 326 IAC 8-9-3 (Volatile Organic Liquid Storage Vessels: Standards):

326 IAC 8-9-3 consists solely of definitions. There are no requirements associated with this rule.

(c) 326 IAC 8-9-4 (Volatile Organic Liquid Storage Vessels, Standards):

The requirements of 326 IAC 8-9-4 still apply to Tanks 2601 and 2602 because the tanks still meet the criteria that make the rule applicable.

(d) 326 IAC 8-9-5 (Volatile Organic Liquid Storage Vessels, Testing and Procedures):

The requirements of 326 IAC 8-9-5still apply to Tanks 2601 and 2602 because the tanks still meet the criteria that make the rule applicable.

(e) 326 IAC 8-9-6 (Volatile Organic Liquid Storage Vessels, Record Keeping and Reporting Requirements):

The requirements of 326 IAC 8-9-6 till apply to Tanks 2601 and 2602 because the tanks still meet the criteria that make the rule applicable.

Changes to the Permit

1. Existing Condition D.1.1:

No changes to Condition D.1.1 are necessary because the proposed modification does not affect the requirements of Condition D.1.1.

2. Existing Condition D.1.2:

No changes to the requirements of Condition D.1.2 are necessary because the requirements after the modifications to Tanks 2601 and 2602 are the same as the requirements before the modification.

However, upon review of Condition D.1.2, it is determined that the condition language as written, is not in permit condition form. In addition, Condition D.1.2 references the rule, not the applicable conditions in the permit. Therefore, Condition D.1.2 shall be amended as follows to amend the language into a format that can be incorporated into a permit.

D.1.2 Volatile Organic Compounds [326 IAC 8-9-4]

(a) Pursuant to 326 IAC 8-9-4, The owner or operator of the twenty-four (24) storage Tanks, identified as T-201, T-202, T-204, T207, T-401, T-801, T-802, T-803, T-804, T-806, T-809, T-810, T-209, T-805, T-808, T-208, T-240, T-2101, T-2102, T-2601, T-2602, T-205, T-206 and T-807,

The owner or operator shall, for all tanks that are not of the types listed in 326 IAC 8-9-2, comply with the following requirements as applicable:

(a) The owner or operator shall, for all tanks with a capacityies greater than or equal to thirty-nine thousand (39,000) gallons, storing volatile organic liquids (VOL) with a maximum true vapor pressure greater than or equal to seventy-five hundredths (0.75) pound per square inch absolute (psia) but less than eleven and one-tenth (11.1) psia, comply with do the following requirements:

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- (1) On or before May 1, 1996, for Each vessel having a permanently affixed roof, install shall be equipped with one (1) of the following:
 - (A) an internal floating roof that meetsing the standards listed in Part (c) of this Condition subsection (c),

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- (B) a closed vent system and control device that meetsing the standards listed in Part (d) of this Condition subsection (d), or
- (C) an equivalent alternative emissions control system that resulting in achieves the same equivalent emissions reductions as the method listed in to that obtained in clause Part (a)(1)(A) of this Condition.
- (2) for Each vessel having an internal floating roof, install shall be equipped with one (1) of the following:
 - (A) At the time of the next scheduled cleaning, but not later than ten (10) years after May 1, 1996, an internal floating roof that meetsing the standards listed in Part (c) of this Conditionsubsection (c),
 - (B) On or before May 1, 1996, a closed vent system and control device that meetsing the standards listed in Part (d) of this Conditionsubsection (d), or
 - (C) On or before May 1, 1996, an equivalent alternative emissions control system that resulting in achieves the same equivalent emissions reductions as the method listed in to that obtained in clause Part (a)(2)(A) of this Condition.
- (3) for Each vessel having an external floating roof, **shall be equipped with** install one (1) of the following:
 - (A) At the time of the next scheduled cleaning, but not later than ten (10) years after May 1, 1996, an external floating roof that meetsing the standards listed in Part (e) of this Condition, in subsection (e).
 - (B) On or before May 1, 1996, a closed vent system that meetsing the standards listed in Part (d) of this Condition, or subsection (d).
 - (C) On or before May 1, 1996, an alternative equivalent emissions control system that resulting in achieves the same equivalent emissions reductions as the method listed in to that obtained in clause Part (a)(3)(A) of this Condition.
- (4) Each vessel under Parts (a) and (b) of this Condition shall be equipped with subject to this subsection, the owner or operator described in the report required in section 6(b) of this rule, install one (1) of the following:
 - (A) emission control equipment, or
 - (B) **emission control equipment and** a schedule for vessel cleaning and installation of emission control equipment.
- (b) On or before May 1, 1996, the owner or operator of The owner or operator shall, for all tanks each vessel with a capacity greater than or equal to thirty-nine thousand (39,000) gallons that stores a VOL with a maximum true vapor pressure greater than or equal to eleven and one-tenth (11.1) psia, but less than or equal to 29.4 psia, shall equip each vessel with a closed vent system with and control device that meetsing the standards listed in Part (d) of this Condition subsection (d).

- (c) The owner or operator shall, Standards applicable to for each storage vessel with an internal floating roof, comply with the are as followings standards:
 - (1) Each applicable tank shall be equipped with permanent affixed roof.
 - (2) Each The internal floating roof shall be designed and operated such that the roof floats on the liquid surface at all times, inside a vessel that has a permanently affixed The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the vessel is completely emptied or subsequently emptied and refilled.

For the purposes of this Part of the Condition, "floating on the liquid surface" does not mean but not necessarily in complete contact with the liquid surface. it

- (3) When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
- (4) Each internal floating roof shall be equipped with **one (1) of the following closure devices:** one (1) of the following closure devices between the wall of the vessel and the edge of the internal floating roof:
 - (A) a foam or liquid-filled seal **that is** mounted in contact with the liquid (liquid-mounted seal),
 - (B) two (2) seals **that are** mounted one (1) above the other **suche** that each **seal** forms a continuous closure that completely covers the space between the wall of the vessel and the edge of the internal floating roof. The lower seal may be vapormounted, but both must be continuous, **or**
 - (C) a mechanical shoe seal that:
 - (i) consists of a metal sheet held vertically against the wall of the vessel by springs or weighted levers, and that is connected by braces to the floating roof, and
 - (ii) a flexible coated fabric or envelope **that** spans the annular space between the metal sheet and the floating roof.

The closure device selected shall be installed between the wall of the vessel and the edge of the internal floating roof.

- (5) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents shall provide a projection below the liquid surface.
- (6) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains shall be equipped with a **gasketed** cover or lid that shall be maintained in a closed position at all times (with no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. The covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
- (7) All automatic bleeder vents shall be equipped with a gasket and shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
- (8) **All** rim space vents shall be equipped with a gasket and shall be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

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(9) All sampling through the Each penetration of the internal floating roof for the purpose of sampling shall be conducted in a sample well. The samplinge well shall have a slit fabric cover that covers at least ninety percent (90%) of the opening.

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- (10) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
- (d) The owner or operator shall, Standards applicable to for each storage vessel with a closed vent system and control device, comply with the are as followings standards:
 - (1) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the vessel and operated with no detectable emission as indicated by an instrument reading of less than five hundred (500) parts per million (ppm) above background and visual inspections as determined by the methods specified in 40 CFR 60, Subpart VV, 60.485(C)*.
 - (2) The control device shall be designed and operated to reduce inlet VOC emissions by ninety-five percent (95%) or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements in 40 CFR 60.18, General Provisions*.
 - * Copies of 40 CFR 60, Subpart VV, 60.485(C); and 40 CFR 60.18, General Provisions referenced may be obtained from the Government Printing Office, Washington, D.C. 20402 or the Indiana Department of Environmental Management, Indiana Government Center North, 100 North Senate Avenue, Indianapolis, Indiana 46204-2220.
- (e) The owner or operator shall, Standards applicable to for each storage vessel with an external floating roof, comply with the are as followings standards:
 - (1) Each external floating roof shall be equipped with a closure device between the wall of the vessel and the roof edge. The closure device shall consist of two (2) seals, one (1) above the other. The lower seal shall be referred to as the primary seal; the upper seal shall be referred to as the secondary seal.
 - (2) Except as provided in **Part** (b)(4) section 5(c)(4) of this rule **condition D.1.8**, the primary seal shall completely cover the annular space between the edge of the floating roof and vessel wall and shall be either a liquid-mounted seal or a shoe seal.
 - (3) The secondary seal shall completely cover the annular space between the external floating roof and the wall of the vessel in a continuous fashion except as allowed in **Part (b)(4)** section 5(c)(4) of **Condition D.1.8** this rule.
 - (4) Except for automatic bleeder vents and rim space vents, each opening in a noncontact external floating roof shall provide a projection below the liquid surface.
 - (5) Except for automatic bleeder vents, rim space vents, roof drains, and leg sleeves, each opening in the roof shall be equipped with a gasketed cover, seal, or lid that shall be maintained in a closed position at all times, without visible gap, except when the device is in actual use.
 - (6) **All a**utomatic bleeder vents shall be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
 - (7) All rim vents shall be set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. Automatic bleeder vents and rim space vents shall be gasketed.
 - (8) Each emergency roof drain shall be provided with a slotted membrane fabric cover that covers at least ninety percent (90%) of the area of the opening.

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(9) The roof shall be floating on the liquid at all times, for example, off the roof leg supports, except when the vessel is completely emptied and subsequently refilled. The process of filling, emptying, or refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.

3. Existing Condition D.1.3:

No changes to Condition D.1.3 are necessary because the proposed changes will not affect the requirements of Condition D.1.3.

4. Condition D.1.4:

No changes to Condition D.1.4 are required because the proposed changes will not affect the requirement to have a preventive maintenance plan.

5. Condition D.1.5:

The testing requirements of Condition D.1.5 consist of the requirements of 326 IAC 8-9-5 (Volatile Organic Liquid Storage Vessels, Testing and Procedures). Upon review of these requirements, it is determined that the requirements are monitoring requirements not testing requirements because the owner or operator is required to "inspect" the tanks and "correct any problems detected during the inspections".

Under Second Significant Permit Modification 089-14987-00326, issued on June 14, 2002, the reviewer incorrectly eliminated the testing requirements that only required testing if deemed necessary and replaced these requirements with the monitoring requirements of 326 IAC 8-9-5.

Therefore, to apply the appropriate requirements, the following changes shall be made:

(a) The original requirements of Condition D.1.5 shall be reintroduced as follows, kept in the compliance determination section, and redrafted to specify apply to the VOC limits of Condition D.1.3.

D.1.5 Testing Requirements [326 IAC 2-7-6(1)]

Testing of the tanks listed in this section is not specifically required by this permit to demonstrate compliance with the limits of Condition D.1.3. However, if testing is required, compliance with the VOC and HAP limits specified in Condition D.1.3 shall be determined by a performance test conducted in accordance with Section C - Performance Testing. This does not preclude any applicable testing requirements under 326 IAC 2-7-5 and 326 IAC 2-7-6.

- (b) A new Condition D.1.6 shall be created in the compliance determination as follows to provide the source with a means of determining the true vapor pressure, as allowed under 326 IAC 8-9-6(i).
 - D.1.6 Methods That Can Be Used to Determine True Vapor Pressure [326 IAC 8-9-6(i)] If the owner or operator is required to determine the maximum true vapor pressure of any applicable tanks, the owner or operator may use available storage temperature data to determine the pressure provided the owner or operator follows the procedures specified below:

- (a) The maximum true vapor pressure for VOLs stored at temperatures above or below ambient temperature shall correspond to the highest local calendar-month average storage temperature, as reported by the National Weather Service.
- (b) For local crude oil or refined petroleum products, the maximum true vapor pressure may be determined as follows:
 - (1) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar month average storage temperature, as reported by the National Weather Service may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517* unless the OAQ specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the samples.
 - (2) The maximum true vapor pressure of each type of crude oil with a Reid vapor pressure less than two (2) pounds per square inch or with physical properties that preclude determination by the recommended method shall be determined from available data and recorded if the estimated maximum true vapor pressure is greater than five-tenths (0.5) psia.
- (c) For all other liquids, the maximum true vapor pressure may be determined by any of the following standard methods:
 - (1) Standard reference texts,
 - (2) ASTM Method D2879-92*, or
 - (3) Calculated or measured by a method approved by the OAQ.
- * Copies of ASTM Method 2879-92 and API Bulletin 2517 referenced may be obtained from the Government Printing Office, Washington, D.C. 20402 or the Indiana Department of Environmental Management, Indiana Government Center-North, 100 North Senate Avenue, Indianapolis, Indiana 46204-2220.
- (c) A new Condition D.1.7 shall be added to include the testing requirements specified in 326 IAC 8-9-6(j):

<u>D.1.7 Testing Requirements, Vessels Storing a Waste Mixture of Indeterminate or Variable Composition [326 IAC 8-9-6(j)]</u>

The owner or operator of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements:

- (a) Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in Condition D.1.6.
- (b) For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for monitoring but below the cutoff for controls as defined in Part (a) of Condition D.1.2, the owner or operator shall perform an initial physical test of the vapor pressure an a subsequent physical test at least once every six (6) months thereafter, using one (1) of the following methods:

- (1) ASTM Method D2879-92*,
- (2) ASTM Method D323-82*, or
- (3) an alternative method approved by the OAQ.
- * Copies of ASTM Method 2879-92 and ASTM Method D323-82 referenced may be obtained from the Government Printing Office, Washington, D.C. 20402 or the Indiana Department of Environmental Management, Indiana Government Center-North, 100 North Senate Avenue, Indianapolis, Indiana 46204-2220.
- (d) A Compliance Monitoring Section and a new Condition D.1.8 shall be added to include the monitoring requirements of 326 IAC 8-9-5 that were previously located in the testing requirements.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.8 Monitoring, Tanks with Internal Floating Roofs [326 IAC 8-9-5]

- (a) Pursuant to 326 IAC 8-9-5, The owner or operator shall, for all tanks subject to the requirements of Part (a) of Condition D.1.2, of the twenty-four (24) storage Tanks, identified as T-201, T-202, T-204, T207, T-401, T-801, T-802, T-803, T-804, T-806, T-809, T-810, T-209, T-805, T-808, T-208, T-240, T-2101, T-2102, T-2601, T-2602, T-205, T-206 and T-807 with a capacities greater than or equal to thirty-nine thousand (39,000) gallons, when storing VOL with a maximum true vapor pressure greater than or equal to seventy-five hundredths (0.75) pound per square inch absolute (psia) but less than eleven and one-tenth (11.1) psia shall do the following: comply with the following requirements as applicable:
- (ba) On and after May 1, 1996, Except as provided in Part (a)(2) of Condition D.1.2, section 4(a)(2) of this rule, the owner or operator shall, for of each vessel equipped with an internal floating roof shall meet the following requirements:
 - (1) Visually inspect the internal floating roof, the primary seal, and the secondary seal, if one is in service, prior to filling the vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the vessel.
 - (2) For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal, if one is in service, through manholes and roof hatches on the fixed roof at least once every twelve (12) months after initial fill.

If the internal floating roof is not resting on the surface of the VOL inside the vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the vessel from service within forty-five (45) days.

If a failure that is detected during inspections required in this section cannot be repaired in forty-five (45) days and if the vessel cannot be emptied within forty-five (45) days, a thirty (30) day extension may be requested from the department in the inspection report required in **Part (e)(1)(C) of Condition D.1.9** section 6(c)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

- (3) For vessels equipped with both primary and secondary seals:
 - (A) visually inspect the vessel as specified in subdivision Part (a)(4) of this Condition, at least every five (5) years; or
 - (B) visually inspect the vessel as specified in subdivision Part (a)(2) of this Condition.
- (4) Visually inspect the internal floating roof, the primary seal, the secondary seal, if one is in service, gaskets, slotted membranes, and sleeve seals each time the vessel is emptied and degassed.

If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than ten percent (10%) open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this subdivision exist before refilling the vessel with VOL.

In no event shall the inspections required by this subsection occur at intervals greater than ten (10) years in the case of vessels conducting the annual visual inspection as specified in **Parts (a)(2) and (a)(3)(B) of this Condition** subdivisions (2) and (3)(B) and at intervals no greater than five (5) years in the case of vessels specified in **Part** subdivision (a)(3)(A) of this Condition.

(5) Notify the department in writing at least thirty (30) days prior to the filling or refilling of each vessel for which an inspection is required by Parts (a)(1) and (a)(4) of this Condition subdivisions (1) and (4) to afford the department the opportunity to have an observer present.

If the inspection required by **Part** subdivision (a)(4) of this Condition is not planned and the owner or operator could not have known about the inspection thirty (30) days in advance of refilling the vessel, the owner or operator shall notify the department at least seven (7) days prior to the refilling of the vessel. **Said** notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification, including the written documentation, may be made in writing and sent by express mail so that it is received by the department at least seven (7) days prior to the refilling.

- (eb) On and after May 1, 1996, Except as provided in section Part 4(a)(3) of Condition D.1.2 this rule, the owner or operator shall, for of each vessel equipped with an external floating roof shall meet the following requirements:
 - (1) Determine the gap areas and maximum gap widths between the primary seal and the wall of the vessel and between the secondary seal and the wall of the vessel according to the following frequency:
 - (A) Measurements of gaps between the vessel wall and the primary seal (seal gaps) shall be performed during the hydrostatic testing of the vessel or within sixty (60) days of the initial fill with VOL and at least once every five (5) years thereafter.
 - (B) Measurements of gaps between the vessel wall and the secondary seal shall be performed within sixty (60) days of the initial fill with VOL and at least once per year thereafter.

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- (C) If any source ceases to store VOL for a period of one (1) year or more, subsequent introduction of VOL into the vessel shall be considered an initial fill for purposes of this subdivision.
- (2) Determine gap widths and areas in the primary and secondary seals individually by the following procedures:
 - (A) Measure seal gaps, if any, at one (1) or more floating roof levels when the roof is floating off the roof leg supports.
 - (B) Measure seal gaps around the entire circumference of the vessel in each place where a one-eighth (c) inch diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the wall of the vessel and measure the circumferential distance of each such location.
 - (C) The total surface area of each gap described in clause (B) shall be determined by using probes of various widths to measure accurately the actual distance from the vessel wall to the seal and multiplying each such width by its respective circumferential distance.
- (3) Add the gap surface area of each gap location for the primary seal and the secondary seal individually and divide the sum for each by the nominal diameter of the vessel and compare each ratio to the respective standards in **Part** (b)(4) of this Condition subdivision (4).
- (4) Make necessary repairs or empty the vessel within forty-five (45) days of identification of seals not meeting the **following** requirements listed in clauses (A) and (B) as follows:
 - (A) The accumulated area of gaps between the vessel wall and the mechanical shoe or liquid-mounted primary seal shall not exceed ten (10) square inches per foot of vessel diameter, and the width of any portion of any gap shall not exceed one and five-tenths (1.5) inches. There shall be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.
 - (B) The secondary seal shall meet the following requirements:
 - (i) The secondary seal shall be installed above the primary seal so that it completely covers the space between the roof edge and the vessel wall except as provided in Part (b) subdivision (2)(C) of this Condition.
 - (ii) The accumulated area of gaps between the vessel wall and the secondary seal used in combination with a metallic shoe or liquid-mounted primary seal shall not exceed one (1) square inch per foot of vessel diameter, and the width of any portion of any gap shall not exceed five-tenths (0.5) inch. There shall be no gaps between the vessel wall and the secondary seal when used in combination with a vapor-mounted primary seal.
 - (iii) There shall be no holes, tears, or other openings in the seal or seal fabric.
 - (C) If a failure that is detected during inspections required in subdivision (a) Part (b)(1) cannot be repaired within forty-five (45) days and if the vessel cannot be emptied within forty-five (45) days, a thirty (30) day extension may be requested from the department in the inspection report required in Part (e)(2)(C) of Condition D.1.9 section 6(d)(3) of this rule.

Such extension request must include a demonstration of unavailability of alternate storage capacity and a specification of a schedule that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

- (5) Notify the department thirty (30) days in advance of any gap measurements required by Part subdivision (b)(1) to afford the department the opportunity to have an observer present.
- (6) Visually inspect the external floating roof, the primary seal, secondary seal, and fittings each time the vessel is emptied and degassed. For all visual inspections, the following requirements apply:
 - (A) If the external floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal fabric, the owner or operator shall repair the items as necessary so that none of the conditions specified in this clause exist before filling or refilling the vessel with VOL.
 - (B) The owner or operator shall notify the department in writing at least thirty (30) days prior to the filling or refilling of each vessel to afford the department the opportunity to inspect the vessel prior to the filling. If the inspection required by this subdivision is not planned and the owner or operator could not have known about the inspection thirty (30) days in advance of refilling the vessel, the owner or operator shall notify the department at least seven (7) days prior to the refilling of the vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the department at least seven (7) days prior to the refilling.
- (d) The owner or operator **shall**, **for** of each vessel that is equipped with a closed vent system and control device described in **Parts** section 4(a)(1)(B), 4(a)(2)(B), or 4(a)(3)(B) of **Condition D.1.2** this rule and meeting the requirements of **Part** section 4(d) of this **Condition D.1.2** rule, other than a flare, shall meet the following requirements:
 - (1) On or before January 1, 1996, submit to the department an operating plan containing the following information:
 - (A) Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation shall include a description of the gas stream that enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device.

If the control device or the closed vent capture system receives vapor gases, or liquid other than fuels from sources that are not subject to this rule, the efficiency demonstration shall include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device.

If an enclosed combustion device with a minimum residence time of seventy-five hundredths (0.75) second and a minimum temperature of eight hundred sixteen degrees Centigrade (816EC) is used to meet the ninety-five percent (95%) requirement, documentation that those conditions will exist is sufficient to meet the requirements of this subdivision.

- (B) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used to monitor the parameter or parameters.
- (2) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the department in accordance with subdivision (1) unless the plan was modified by the department during the review process. In this case, the modified plan applies.
- (e) The owner or operator of each source that is equipped with a closed vent system and a flare to meet the requirements in **Parts** section 4(a)(4) or 4(d) of this rule **Condition D.1.2** shall meet the requirements specified in the general control device requirements in 40 CFR 60.18(e) and 40 CFR 60.18(f)*.
 - * Copies of 40 CFR 60.18(e) and 40 CFR 60.18(f) referenced may be obtained from the Government Printing Office, Washington, D.C. 20402 or the Indiana Department of Environmental Management, Indiana Government Center-North, 100 North Senate Avenue, Indianapolis, Indiana 46204-2220.

6. Existing Condition D.1.6:

Existing Condition D.1.6 (now Condition D.1.9) shall be amended as follows to amend the applicable 326 IAC 8-9-6 language to a permit friendly form, to change Condition reference of Part (b) of the Condition from D.1.2 to the correct condition, D.1.3, and add the requirements of 40 CFR 60, Subpart Kb.

D.1.69 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, The Permittee shall maintain records of the types of volatile petroleum liquid stored, the maximum true vapor pressure of the liquid as stored, and the results of the inspections performed on the storage vessels. Such records shall be maintained for a period of two (2) years and shall be made available to the commissioner upon written request.
- (b) To document compliance with Condition **D**.1.**32**, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be taken monthly and shall be complete and sufficient to establish compliance with the liquid fuel throughput limits established in Condition D.1.**32**.
 - (1) The amount and type of liquid fuel transferred through tanks;
 - (2) The number of hours for conducting gasoline tank cleaning; and
 - (3) A log of the dates of liquid transfers and tank cleaning.

- (c) Pursuant to 60.116b(a) and (b), the owner or operator shall, for tanks 2601 and 2602, keep readily accessible records showing the dimension of the storage vessel and an analysis showing its capacity. Said records shall be kept for the life of the source.
- (d) Pursuant to 326 IAC 8-9-61 and 326 IAC 8-9-6, the owner or operator of the two (2) storage Tanks, identified as T-1501 and T-1502, which have a capacity of less than thirty-nine thousand (39,000) gallons shall, for all tanks that are not of the types listed in 326 IAC 8-9-2: maintain a record and submit to the IDEM, OAQ a report containing the following information for each vessel:
 - (1) maintain a record containing, as applicable:
 - (A) the vessel identification number,
 - (B) the vessel dimensions, and
 - (C) the vessel capacity, and
 - (D) a description of the emission control equipment for each vessel described in Parts (a) and (b) of Condition D.1.2, or a schedule for the installation of equipment on vessels described in Part (a) or (b) of Condition D.1.2 with a certification that the emission control equipment meets all applicable standards.

and

(2) submit a report containing the information required in Part (c)(1) of this Condition.

These records required shall be maintained for the life of the vessels.

- (e) Pursuant to 326 IAC 8-9-1(a) and 326 IAC 8-9-6, the owner or operator shall, for all tanks with a capacity of 39,000 gallons or more that store a VOL with a maximum true vapor pressure less than 0.5 psia, and all tanks with a capacity of 39,000 gallons or more that store a VOL with a maximum true vapor pressure equal to or greater than 0.75 psia but less than 29.4 psia, as applicable, comply with the following requirements:
 - (1) The owner or operator shall, for each vessel equipped with a permanently affixed or internal floating roof:
 - (A) Keep a record of each inspection performed as required in Parts (a)(1) through (a)(4) of Condition D.1.8, with each record identifying:
 - (i) the vessel inspected, by identification number,
 - (ii) the date the vessel was inspected, and
 - (iii) the observed condition of each component of the control equipment, including the following:
 - (a) all seals,
 - (b) an internal floating roof, and
 - (c) all fittings;
 - (B) If any of the conditions described in Part (a)(2) of Condition D.1.8 are detected during the required annual visual inspection, maintain a record and submit a report to the OAQ, identifying:

- (i) the vessel by identification number,
- (ii) the nature of the defects, and
- (iii) the date the vessel was emptied or the nature of and date the repair was made;

Said report shall be submitted within 30 days of the inspection.

and

- (C) After each inspection required in Part (a)(3) of Condition D.1.8 where holes or tears in the seal or seal fabric, defects in the internal floating roof, or other control equipment defects listed in Part (a)(3)(B) of Condition D.1.8 are detected, maintain and submit a report to the OAQ, identifying:
 - (i) the vessel identification number, and
 - (ii) the reason the vessel did not meet the specifications of Parts (a)(1)(A) or (a)(2)(A) of Condition D.1.2, or Part (a) of Condition D.1.8, and a description of all repairs made.

Said report shall be submitted within 30 days of the inspection.

- (2) The owner or operator shall, for each vessel equipped with an external floating roof:
 - (A) keep a record of each gap measurement performed as required by Part (b) of Condition D.1.8, with each record identifying the vessel in which the measurement was made and containing the following:
 - (i) the date of the measurement,
 - (ii) the raw data obtained in the measurement, and
 - (iii) the calculations described in Parts (b)(2) and (b)(3) of Condition D.1.8;
 - (B) within 60 days of performing the seal gap measurements required by Part (b)(1) of Condition D.1.8, furnish the OAQ with a report that contains:
 - (i) the date of the measurement,
 - (ii) the raw data obtained in the measurement, and
 - (iii) the calculations described in Parts (b)(2) and (b)(3) of Condition D.1.8;

and

- (C) after each seal gap measurement where gaps exceeding the limitations specified in Part (b) of Condition D.1.8 are detected, submit a report to the OAQ identifying the affected vessel and including the information required in Part (e)(2)(B) of this Condition, and the date the vessel was emptied or if the vessel was repaired, a list of the repairs made and the date(s) the repairs were made.
- (3) The owner or operator shall, for each vessel equipped with a closed vent system with a control device, comply with the following requirements:
 - (A) for all vessels that are equipped with a control device other than a flare, the owner or operator shall:

- (i) submit an operating plan as required in Part (d) of Condition D.1.2, and
- (ii) maintain the following records:
 - (a) the operating plan, and
 - (b) all measured values of the parameters monitored according to the requirements of art (c)(2) of Condition D.1.8;

and

- (B) for all vessels with a closed vent system and a flare, the owner or operator shall:
 - (i) keep records of all periods of operation during which the flare pilot flame is absent,
 - (ii) furnish the OAQ with a report containing the measurements required by 40 CFR 60.18(f)(1) through 40 CFR 60.18(f)(5)* as required by 40 CFR 60.8.

Said report shall be submitted within 6 months of the initial startup date, and

- (iii) furnish the OAQ with a semiannual report of all periods recorded under 40 CFR 60.115* in which the pilot flame was absent.
- * Copies of the Code of Federal Regulations (CFR) referenced may be obtained from the Government printing Office, Washington, D.C. 20402 or the Indiana Department of Environmental Management, Indiana Government Center-North, 100 North Senate Avenue, Indianapolis, Indiana 46204-2220.
- (4) The owner or operator shall, for all tanks with a true vapor pressure less than 0.75 psia, maintain a record and notify the Office of Air Quality (OAQ) of all periods when the maximum true vapor pressure of the liquid exceeds 0.75 psia. The notification shall be submitted to the OAQ within 30 days of the exceedance.
- (f) Pursuant to 326 IAC 8-9-1(c) and 326 IAC 8-9-6, the owner or operator shall, for all tanks with a capacity of 39,000 gallons or more that store a VOL with a maximum true vapor pressure equal to or greater than 0.5 psia but less than 0.75 psia that is not equipped with a closed vent system with a control device meeting the standards of Condition D.1.2:
 - (1) maintain a record of the maximum true vapor pressure of the VOL stored in each applicable vessel, with the record containing:
 - (i) the type of VOL stored,
 - (ii) the dates of the VOL storage, and
 - (iii) for each day of VOL storage, the average stored temperature for VOLs stored above or below the ambient temperature or average ambient temperature for VOLs stored at ambient temperature, and the corresponding maximum true vapor pressure.

If any applicable tank under this Subpart of the Condition stores a waste mixture of indeterminate or variable composition, the owner or operator shall comply with the requirements of Condition D.1.7 instead of the requirements of this Subpart.

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and

(2) maintain a record and notify the Office of Air Quality (OAQ) of all periods when the maximum true vapor pressure of the liquid exceeds 0.75 psia. The notification shall be submitted to the PAQ within 30 days of the exceedance.

All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

7. Existing Condition D.1.7:

No changes to existing Condition D.1.7 (now Condition D.1.10) are necessary because the reporting requirements of Condition D.1.7 (now Condition D.1.10) do not apply to the affected tanks (2601 and 2602).

Conclusion

The modifications to this stationary bulk liquid fuel storage and transfer terminal shall be subject to the conditions of **Minor Source Modification 089-16040** and **Minor Permit Modification 089-16216**.